

TRAUMA NURSE COORDINATOR EDUCATION CONFERENCE

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INJURY PREVENTION



INJURY PREVENTION: AN OVERVIEW

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INJURIES...WHAT WE KNOW

- Unintentional injuries are 4th leading cause of death in US
- Leading cause of death between ages 1 and 4
- Over 40% preventable
- ATS, ACS, AAST collaborative efforts
- Initiatives and resources:
 - National Trauma Awareness Month
 - Violence and Injury Prevention
 - CDC Injury Center
 - Healthy People 2020 – Injury and Violence

10 Leading Causes of Death by Age Group, United States – 2017

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 4,580	Unintentional Injury 1,267	Unintentional Injury 718	Unintentional Injury 860	Unintentional Injury 13,441	Unintentional Injury 25,669	Unintentional Injury 22,828	Malignant Neoplasms 39,266	Malignant Neoplasms 114,810	Heart Disease 519,052	Heart Disease 647,457
2	Short Gestation 3,749	Congenital Anomalies 424	Malignant Neoplasms 418	Suicide 517	Suicide 6,252	Suicide 7,948	Malignant Neoplasms 10,900	Heart Disease 32,658	Heart Disease 80,102	Malignant Neoplasms 427,896	Malignant Neoplasms 599,108
3	Maternal Pregnancy Comp. 1,432	Malignant Neoplasms 325	Congenital Anomalies 188	Malignant Neoplasms 437	Homicide 4,905	Homicide 5,488	Heart Disease 10,401	Unintentional Injury 24,461	Unintentional Injury 23,408	Chronic Low. Respiratory Disease 136,139	Unintentional Injury 169,936
4	SIDS 1,363	Homicide 303	Homicide 154	Congenital Anomalies 191	Malignant Neoplasms 1,374	Heart Disease 3,681	Suicide 7,335	Suicide 8,561	Chronic Low. Respiratory Disease 18,667	Cerebro-vascular 125,653	Chronic Low. Respiratory Disease 160,201
5	Unintentional Injury 1,317	Heart Disease 127	Heart Disease 75	Homicide 178	Heart Disease 913	Malignant Neoplasms 3,616	Homicide 3,351	Liver Disease 8,312	Diabetes Mellitus 14,904	Alzheimer's Disease 120,107	Cerebro-vascular 146,383
6	Placenta Cord. Membranes 843	Influenza & Pneumonia 104	Influenza & Pneumonia 62	Heart Disease 104	Congenital Anomalies 355	Liver Disease 918	Liver Disease 3,000	Diabetes Mellitus 6,409	Liver Disease 13,737	Diabetes Mellitus 59,020	Alzheimer's Disease 121,404
7	Bacterial Sepsis 592	Cerebro-vascular 66	Chronic Low. Respiratory Disease 59	Chronic Low. Respiratory Disease 75	Diabetes Mellitus 248	Diabetes Mellitus 823	Diabetes Mellitus 2,118	Cerebro-vascular 5,198	Cerebro-vascular 12,708	Unintentional Injury 55,951	Diabetes Mellitus 83,564
8	Circulatory System Disease 449	Septicemia 48	Cerebro-vascular 41	Cerebro-vascular 56	Influenza & Pneumonia 190	Cerebro-vascular 593	Cerebro-vascular 1,811	Chronic Low. Respiratory Disease 3,975	Suicide 7,982	Influenza & Pneumonia 46,862	Influenza & Pneumonia 55,672
9	Respiratory Distress 440	Benign Neoplasms 44	Septicemia 33	Influenza & Pneumonia 51	Chronic Low. Respiratory Disease 188	HIV 513	Septicemia 854	Septicemia 2,441	Septicemia 5,838	Nephritis 41,670	Nephritis 50,633
10	Neonatal Hemorrhage 379	Perinatal Period 42	Benign Neoplasms 31	Benign Neoplasms 31	Complicated Pregnancy 168	Complicated Pregnancy 512	HIV 831	Homicide 2,275	Nephritis 5,671	Parkinson's Disease 31,177	Suicide 47,173

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.



Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

NATIONAL INJURY PREVENTION PROGRAMS

- Alcohol/Drug Overdose
- ATVs
- Burns
- Firearm Safety
- Geriatric Falls
- Helmet Use
- Motor Vehicle Safety
- Pedestrian Safety
- Pediatric Falls
- Poisoning
- Prescription Drug Overdose
- Snowmobiles
- Sports Injuries/Concussion
- Water-Related Injuries

NEBRASKA DEMOGRAPHICS

- Over 77,000 square miles
- 1.95 million people
- 93 counties
- 89% of cities have less than 3,000 people (hundreds of towns less than 1,000)
- 88 hospitals in Nebraska; 64 are Critical Access Hospitals
- Paid versus Rural EMS Squads

NEBRASKA INJURY PREVENTION

- Safe Kids Nebraska (Safe Kids Coalition)
- Concussion (Training Courses)
 - CDC:
 - Heads UP Concussion in Youth Sports
 - Heads UP Clinicians: Addressing Concussion in Sports Among Kids and Teens
 - NFHS-National Federation of High Schools:
 - Concussion in Sports: What You Need to Know
- Older Adult Falls (Prevention Programs)
 - Tai Chi: Moving for Better Balance
 - Stepping On
 - Stopping Elderly Accidents, Deaths & Injuries (STEADI)

FALL INJURY PREVENTION

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THE CHALLENGE: OLDER ADULT FALLS IN THE US

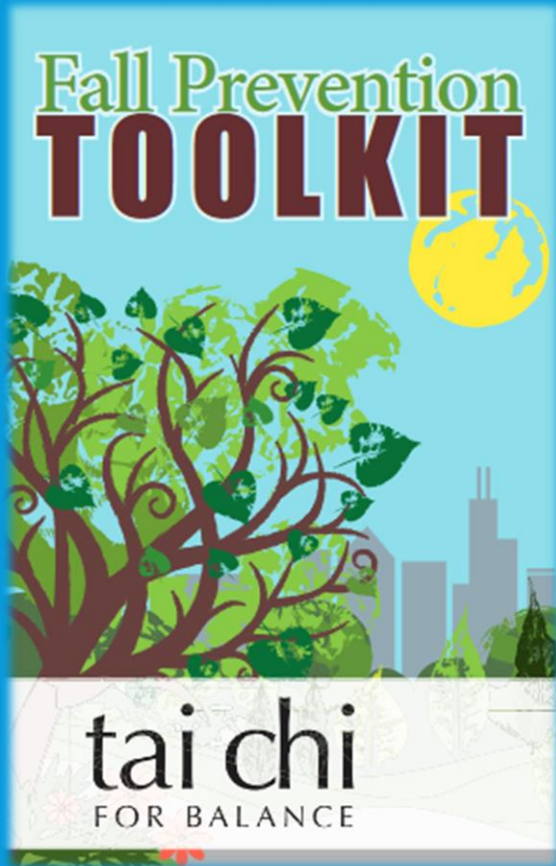
- 1 in 3 Americans aged 65+ fall each year
- Every 13 seconds an older adult is treated in the ER for a fall
- Every 20 minutes an older adult dies from a fall
- Leading cause of head injuries
- In 2013, the total cost of falls was \$34 billion
- Total cost may reach \$67.7 billion by 2020

BENEFITS OF TAI CHI FOR BALANCE

- 12 week classes with balance tests (most ongoing)-instructors “suggested donation”
 - Sit to Stand
 - Single Limb Stand
 - 75 classes in Omaha with 2,441 attendees
- Compared with Oregon Research Institute(ORI), Omaha’s data shows more improvement
- [Ncoa.org/FallsPrevention](https://www.ncoa.org/falls-prevention) says Tai Chi for Balance:
 - 55% reduction in falls rate
 - \$530 net benefit per participant
 - 509% ROI(National Council of Aging, 2015)



TOOLKIT



- Fall statistics
- Physical Activity
- Home Safety
- Medication
- Vision
- Falls Tracker
- Balance Self Test



- New instructor training yearly- applications in June for Fall on website
- Tai Chi 8 form and 16 form refreshers 7/year (and Shibashi)
- Bring it to your community!
www.taichibalance.org



WATER SAFETY PROGRAMS FOR CHILDREN

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ADVERTISING

- Social Media
- Press releases
- Radio ads
- Flyers to schools before end of the year:
 - Library
 - In-house advertising



VENDORS

- ☐ Choking Charlie/CPR for Parents
 - ☐ Water Watchers for Parents
 - ☐ Lucy Lifeguard
 - ☐ Reach, throw or go
 - ☐ Float or sink which do you think
- ☐ Police and Fire-tour of equipment
 - ☐ Skin cancer awareness
 - ☐ Fingerprinting/IDs

FREEBIES



Bounce house
inflatables

Pool
noodles/Kickboards

Lifejackets

Sunscreen

Backpacks

Floating keychains

Large prize
giveaways



PREVENTING LAWN MOWER INJURIES IN CHILDREN

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LIFELONG IMPACT

- Lawn mower injuries to children are often extremely traumatic and can include amputation or even death
- The emotional distress can last a lifetime for the child and family



LAWN MOWER INJURY STATISTICS

- In the US:
 - 9000+ Children go to the ER for lawn mower related injuries every year
 - 24 ER visits per day
 - Cuts, fractures, burns, amputation
 - Hand/finger most commonly injured body region
 - 800 children are run over by a riding mower annually
 - Of these incidents, 600 require amputation of some kind
 - Lawn mower related injuries are the leading cause of amputations for children
 - 80% of injured children are boys
 - Most commonly injured ages are 3 and 16
 - Children younger than 5 are more likely than older children to be burned
 - Children 5-17 are more likely than younger children to be struck or cut by the lawn mower or a projectile

WHEN CAN KIDS MOW THE LAWN?

- According to the AAP, children should be at least:
 - 12 years or older to operate a Push Mower
 - 16 years or older to operate a Riding Mower
- Before learning to mow the lawn, children should be:
 - Strong and mature enough to operate the mower
 - Show good judgement and decision making
- Teens should be supervised by an adult before they are allowed to mow on their own

LAWN MOWING SAFETY TIPS

- Kid-free zone
 - Keep children out of the lawn while mowing
 - Children younger than 6 years of age should be kept indoors during mowing
 - They tend to be attracted to a mower in use
- Never allow a child to ride as a passenger on a riding mower
- Never let children play on or near a lawn mower, even when it is not in use



LAWN MOWING SAFETY TIPS (CONT.)

- Teach and supervise teens:
 - Children should be at least 12 years old to operate a push mower and at least 16 years old before using a riding mower
 - An adult should supervise teens before they are allowed to operate a lawn mower on their own
- Always wear closed toed shoes and eye protection when mowing



ATV SAFETY PROGRAM

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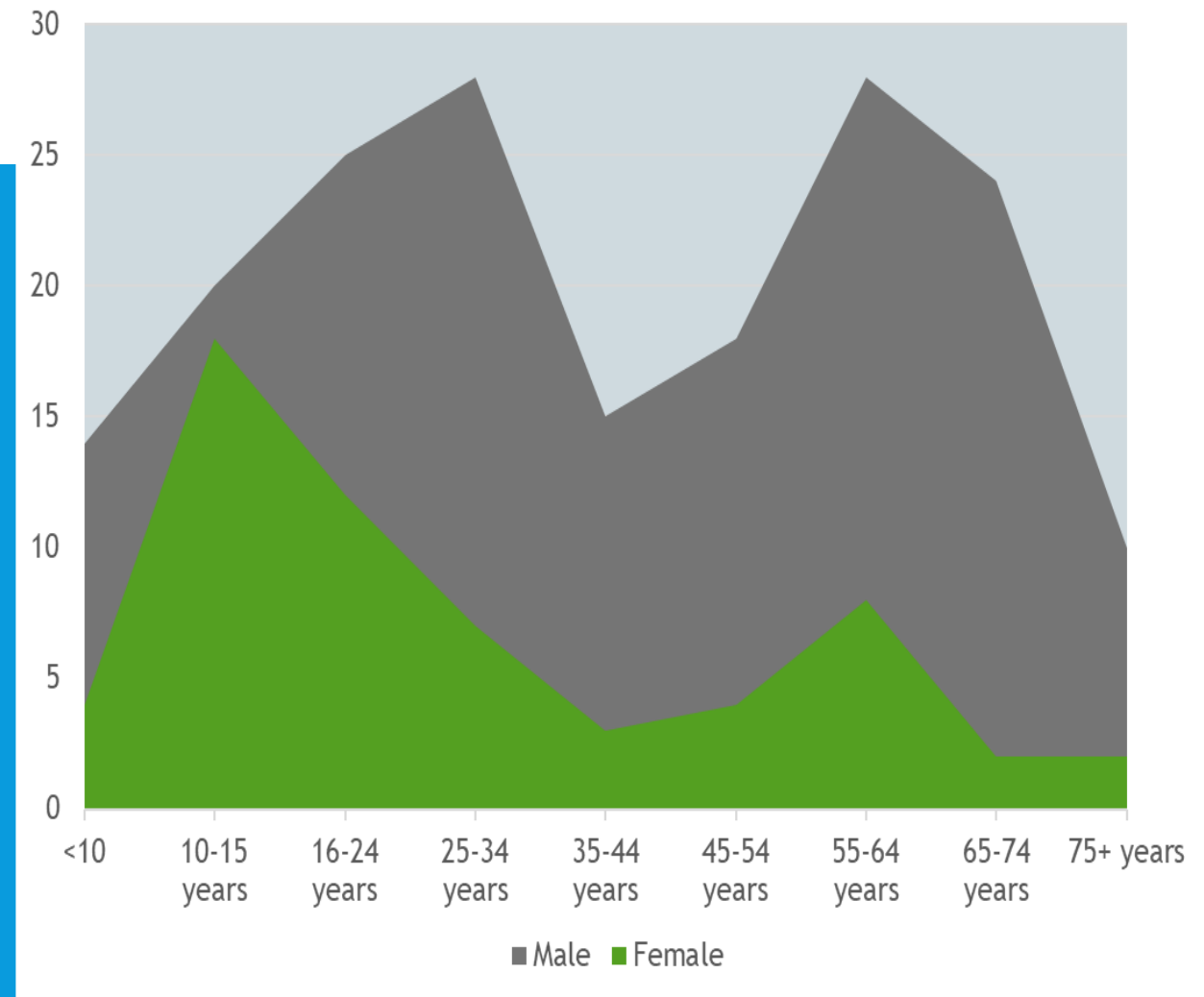
HOW DID IT START?

- In 2014, CHI GSH reported 18 admits to ATV accidents
- In 2015, it doubled to 36
- We recognized the need for education
- We partnered with amazing agencies!!!



STATISTICS...

- Over 92% of ATV-related fatalities involve one or more unsafe behaviors
- In many sources, greater than 90% of ATV injuries to youth under 16 happen when operating an adult size ATV
- Nationally in 2015, there were an estimated 97,200 emergency room visits related to ATV injuries
- In Nebraska, according to DHHS, out of 1335 agricultural-related trauma injuries requiring medical care from 2012-2014, ATVs were most frequent cause of injury, 18.1%
- ATV injuries are predominantly males and persons aged 10-15 (15.7%), 16-24 (15.3%), and 55-64 years (14.9%)



ATV-AWARE

The Issue

All-terrain vehicles (ATVs) are a useful mode of transportation on farms and ranches, yet there are known safety hazards associated with their use. Statistics from the Nebraska Department of Health & Human Services show 578 hospital emergency room visits due to ATV incidents in 2016, and that does not include a large number of accident victims treated elsewhere. Nationally, a staggering 44% of child fatalities from 1982 to 2015 were age 12 and under. Education for awareness of safe behaviors related to ATV use is lifesaving for all ages.

The Response



Together, Nebraska Extension, Nebraska Safety Center, Central States Center for Agricultural Safety and Health, and CHI Health Good Samaritan in Kearney offer

"ATV Aware" as a program in a variety of settings. A custom-made simulator, made to mimic the actual experience of riding an ATV, lets participants learn about safe riding behaviors and laws. We will customize the experience for any outdoor or indoor public events, as well as programs for schools, organizations, clubs, or businesses, with or without the electric simulator.



As a result of attending this session, I plan to:

"share with grandchildren and son-in-law"

"wear my helmet"



"slow down"

"speak up and train my family"

"be more aware of what I am doing"



The best thing this presenter did was:

"thoroughly addressed our questions"

"made very interesting"



"kept it fun"

"4-wheeler demonstration"

"explain things correctly"

Funding for ATV Aware Pilot Project is from Central States Center for Agricultural Safety and Health NIOSH (USA OH010162).

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ATV SIMULATOR



N EXTENSION
ATV  **AWARE**



AgHealth
Central States
Center for Agricultural
Safety and Health

www.unmc.edu/publichealth/cscash

ATV SIMULATOR PROGRAM

- Has reached over 10,000 in Nebraska, Indiana, Kansas, and Wyoming (face to face learning opportunities)
- Cost: \$65 plus .76 mile from Kearney
- Contact: Susan Harris-Broomfield, Educator – Rural Health, Wellness and Safety
- susan.harris@unl.edu · 308.832.0645 · UNL Extension, PO Box 31, Minden NE 68959



- ✓ Size of ATV matters!
- ✓ Where your body should be matters!
 - ✓ Loads can change your stability!
 - ✓ Roadway Dangers!
 - ✓ Dangerous Terrains!
 - ✓ Correct Protection!
 - ✓ Laws in Nebraska!
- ✓ Don't forget the UTVs!
 - ✓ Risky behaviors!

QUESTIONS

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